THAT WHICH IS CLAIMED IS:

1.   An oligomeric MHC complex comprising at least two chimeric proteins, said chimeric proteins comprising a first section derived from an MHC peptide chain or a functional part thereof and a second section comprising an oligomerising domain derived from an oligomer-forming coiled-coil protein, wherein formation of the oligomeric MHC complex occurs by oligomerisation at the oligomerising domain of the chimeric proteins, and wherein at least two of the first sections are derived from the same MHC peptide chain.

2.   An oligomeric MHC complex of claim 1 wherein the first section of the chimeric proteins is derived from the extra-cellular part of the MHC class I or II α chain.

3.   An oligomeric MHC complex of claim 1 wherein the first section of the chimeric proteins is derived from the extra-cellular part of the MHC class I or II β chain.

4.   An oligomeric MHC complex of claim 1 wherein the oligomerising domain comprised in the second section in at least one of the chimeric proteins is derived from the pentamerisation domain of the human cartilage oligomeric matrix protein (COMP).

5.   An oligomeric MHC complex of claim 4 wherein the pentamerisation domain of COMP comprised in the second section in at least one of the chimeric proteins comprises and preferably consists of the amino acids 1 to 128, preferably 20 to 83, most preferably 20 to 72 of COMP.

6.   An oligomeric MHC complex of claim 1 wherein at least one of the chimeric proteins further comprises a first linker between the MHC peptide chain and the oligomerising domain.

7.   An oligomeric MHC complex of claim 1 wherein at least one of the chimeric proteins further comprises one or more domains selected from the group consisting of a second linker, a tagging domain and a purification domain.

8. An oligomeric MHC complex according to claim 1 further comprising the complementary MHC peptide chains to at least two of the chimeric proteins to form functional MHC binding complexes.

9. An oligomeric MHC complex according to claim 8 further comprising peptide bound to the MHC portions of the complex in the groove formed by the MHC $\alpha 1$ and $\alpha 2$ domains for class I complexes or the MHC $\alpha 1$ and $\beta 1$ domains for class II complexes.

10. An oligomeric MHC complex according to claim 9 wherein the peptide is substantially homogeneous.

11. An oligomeric MHC complex according to claim 1 comprising a label.

12. An oligomeric MHC complex according to claim 11 wherein the label is selected from the group consisting of a light detectable label, a radioactive label, an enzyme, an epitope, a lectin, or biotin.

13. A chimeric protein comprising a first section derived from an MHC peptide chain or a functional part thereof and a second section comprising an oligomerising domain derived from an oligomer-forming coiled-coil protein which coiled-coil protein oligomerises by alignment of at least two substantially identical versions of the polypeptide chain from which the oligomerising domain is derived.

14. A chimeric protein according to claim 13 comprising an oligomerising domain derived from the pentamerisation domain of the human cartilage oligomeric matrix protein (COMP).

15. A chimeric protein according to claim 14 wherein the oligomerising domain comprises the amino acids 20 to 72 of COMP.

16. A chimeric protein according to claim 14 wherein the oligomerising domain comprises the amino acids 20 to 83 of COMP.

17.   A chimeric protein according to claim 14 wherein the oligomerising domain comprises the amino acids 1 to 128 of COMP.

18.   A recombinant expression cassette comprising a promoter sequence operably linked to a nucleotide sequence coding for a chimeric protein as defined in claim 13.

19.   A vector comprising the recombinant expression cassette of claim 18.

20.   A pharmaceutical or diagnostic composition, comprising an oligomeric MHC complex according to any one of claims 1 to 12, optionally in combination with a pharmaceutically acceptable carrier.

21.   A method of labeling and or detecting mammalian T cells according to the specificity of their antigen receptor, the method comprising

    (iii)   combining an oligomeric MHC complex according to any one of claims 1 to 12 and a suspension or biological sample comprising T cells, and

    (iv)   detecting the presence of specific binding of said complex and the T cells.

22.   A method of separating mammalian T cells according to the specificity of their antigen receptor, the method comprising

    (iii)   combining an oligomeric MHC complex according to any one of claims 1 to 12 and a suspension or biological sample comprising T cells, and

    (iv)   separating T cells bound to said complex from unbound cells.

23.   A primer consisting of a DNA sequence selected from the group consisting of BMC #1 [Seq ID No. 2], BMC #2 [Seq ID No. 3], BMC #3 [Seq ID No. 8], BMC #4 [Seq ID No. 9], BMC #5 [Seq ID No. 10], BMC #6 [Seq ID No. 11], BMC #7 [Seq ID No. 12], BMC #8 [Seq ID No. 13], BMC #9 [Seq ID No. 14], BMC #10 [Seq ID No. 15], BMC #11 [Seq ID No. 18], BMC #12 [Seq ID No. 19], A2S #1 [Seq ID No. 20], and A2S #2 [Seq ID No. 21].